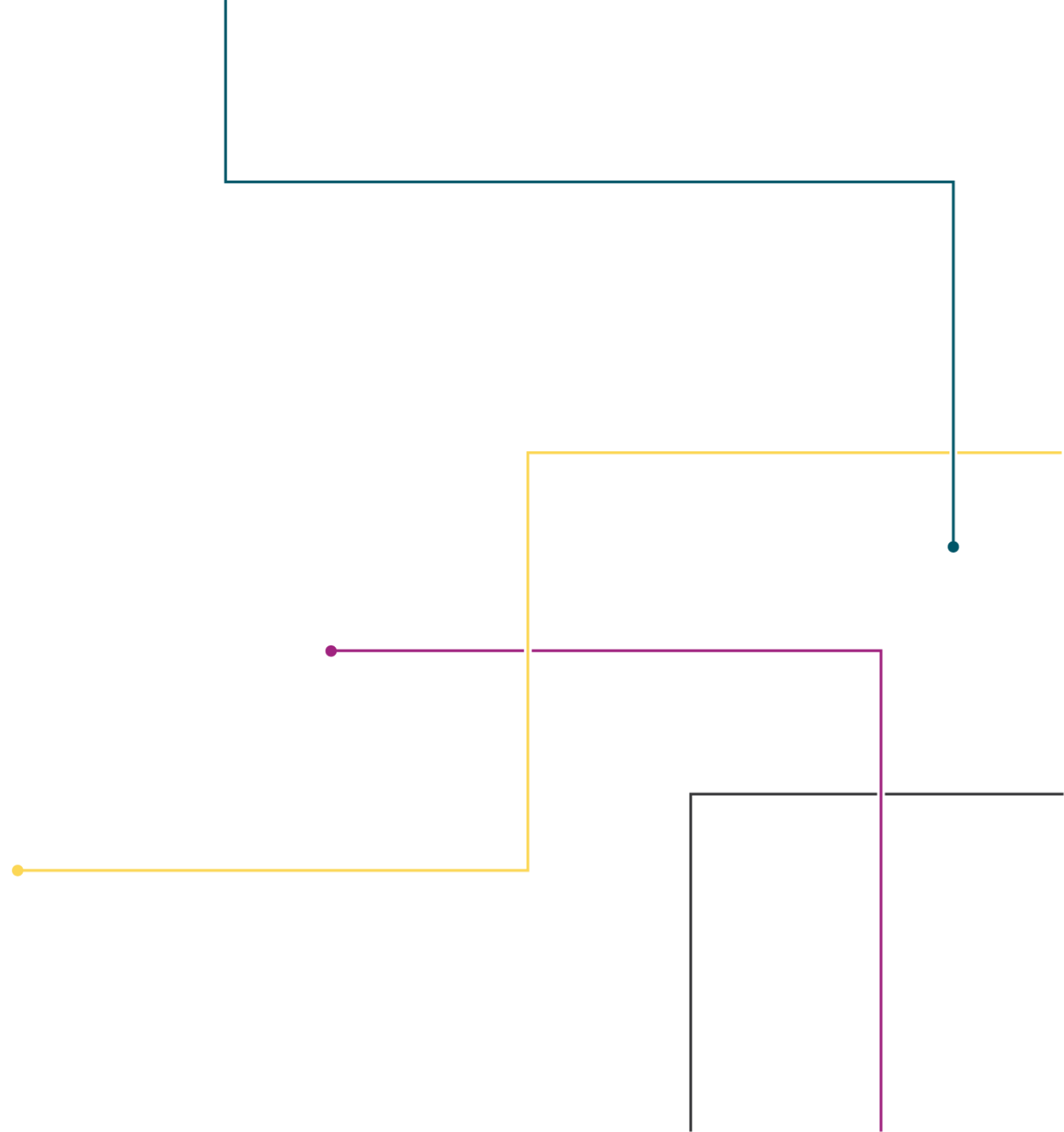# CLOUD SERVICES

ROB THARP

Cloud Services Manager

VIRTUAL SERVICES FAIR

10/20/2021

CLOUD COMPUTING

- Infrastructure as a service (IaaS)

  - Compute and storage services provided and managed by a 3rd party provider

  - Virtual Machines, File shares, Networking

- Platform as a service (PaaS)

  - Managed database instances, message queues , functions, AI and ML platforms

- Software as a service (SaaS)

  - Not offered by cloud services but overseen by ECOS process

SERVICES

- All current Cloud services offered by VITA are managed and provided through our Server Storage and Data Center Provider (SSDC) Unisys.

- The SSDC is responsible for managing each of the Cloud Service Platforms (CSP).

- Cloud services are currently offered on 3 major platforms,

    - Amazon Web Services (AWS),

    - Oracle Cloud Infrastructure (OCI)

    - Microsoft's cloud platform (Azure).

WHY

- Rapid Deployment (Relatively)

- Innovative services and capabilities

- Short term or no commitments

- Potential cost savings

SERVICE CATALOG

- Compute services

- Storage services

- Networking and data center services (e.g. monitoring and auditing capabilities)

- DevOps services – (AWS and Azure)

- Data analysis services (data lake and catalog services)

- VITA will continuously make new services available as required

- All Services that are considered FedRamp Moderate should be available

ORDERING

Services are ordered through the [Key Stone Edge service catalog](#) as a Request For Service (RFS). Information should be provided about the number and types of resources requested.

TEBS   eVA   Statewide IT Contracts   IT Service Rates   IT Catalog Services

VIRGINIA IT AGENCY   Service Catalog   Knowledge   Request Assistance

Home > Service Catalog > Cloud Services

Amazon Web Services (AWS)
The cloud service is provided as a means to access computing services such as servers, networking, storage, database, deployment, developer tools and software. The hardware, operating system (OS), software, networking features chosen provide high availability, redundancy, security and service options. AWS must be implemented with Direct Connect.

Microsoft Azure Infrastructure Service
The cloud service is provided as a means to access computing services such as servers, networking, storage, database, deployment, developer tools and software. The hardware, operating system (OS), software, networking features chosen provide high availability, redundancy, security and service options. Azure must be implemented with ExpressRoute.

Oracle Cloud Infrastructure (OCI)
The cloud service is provided as a means to access computing services such as servers, networking, storage, database, deployment, developer tools and software. The hardware, operating system (OS), software, networking features chosen provide high availability, redundancy, security and service options. OCI must be implemented with Oracle FastConnect.

RATES

- Cloud services are charged on a consumption model.

- Pricing can be found from each provider.(Pricing links are on the included slides)

- Discounts up to 40% or more for some services from AWS and Azure are offered for an annual commitment

- Vita Charge Back Rates

  - https://www.vita.virginia.gov/media/vitavirginiagov/services/pdf/VITA-FY22-Chargeback-Rates-9-24-21.pdf

RATES

- Agency account set-up:
  - $564.50 per agency/only charged once per agency
  - Setup required to add a new Agency into the Virtual Data Center landing zone

- Managed service account set-up:
  - $1,129.00 per project
  - Charged per cloud environment/agency

- Stealth installation:
  - $195.88 per instance
  - Set-up cost for stealth service

- Migration and consulting:
  - Labor rates
  - No mark-up is applied to material costs if required

RFS

- Agencies should provide enough information in the RFS to allow for a complete solution

- The SSDC and MSI should work with the Agency to validate the request

- All 3 cloud providers have resources and are willing to help Agencies with their RFS submission

- The proposed solution and NTP will be based on budgetary amounts

    - Agencies should work with the SSDC to budget for planned growth

    - Agencies should expect monthly costs to fluctuate slightly

AWS

- Leverages AWS Commercial Cloud (Not GOV Cloud)

- Pricing Calculator https://calculator.aws/

- FedRamp Services https://aws.amazon.com/compliance/services-in-scope/

- Industry standard with a wide variety of IaaS and PaaS service offerings.

ORACLE CLOUD INFRASTRUCTURE (OCI)

- Only Current GOV Cloud offering

- Pricing Calculator https://www.oracle.com/cloud/cost-estimator.html

- Compliance https://www.oracle.com/cloud/compliance/

- Good for existing Oracle workloads

- May require or be best implemented using current Oracle versions

AZURE

- Pricing Calculator https://azure.microsoft.com/en-us/pricing/calculator

- Compliance https://docs.microsoft.com/en-us/azure/azure-government/compliance/azure-services-in-fedramp-auditscope#azure-government-services-by-audit-scope

- Can leverage the Hybrid licensing benefit and may reduce MS licensing costs vs other cloud platforms

VITA SERVICE TALKS

Let's continue the conversation

LET'S CONTINUE THE CONVERSATION

VITA is offering customers an opportunity to expand upon the discussions that were started today. These service talks will either be one-on-one (agency/supplier) or in open group settings and will provide agencies the opportunity to ask more detailed questions about the services and how they can be applied to their organizations.

PLEASE VISIT THE VITA WEBSITE, VIRTUAL SERVICES FAIR PAGE, FOR INFORMATION ON JOINING THE GROUP SESSIONS AND SIGNING UP FOR 1:1 SESSIONS: HTTPS://WWW.VITA.VIRGINIA.GOV/TECHNOLOGY-SERVICES/SERVICES-FAIR/

VIRGINIA
IT AGENCY

The following VITA service talks have a capacity of 500 attendees:

- **Cloud services**
  - Tuesday, Nov. 9: 9 – 10:30 a.m.
  - Tuesday, Nov. 16: 1 – 2:30 p.m.

- **Messaging services**
  - Thursday, Oct. 21: 1 – 2:30 p.m.
  - Thursday, Nov. 4: 9 – 10:30 a.m.

- **Voice and data services update**
  - Monday, Oct. 25: 1 – 2:30 p.m.
  - Monday, Nov. 15: 9 – 10:30 a.m.

Questions can be submitted in advance by emailing businessreadiness@vita.virginia.gov. Please include the topic in the subject line. For example: Question for messaging service talk

One-on-one service talks are available first come, first served. Please coordinate with your team and sign up your agency for one session only.

- **Application integration services (AIS)**
  - Wednesday, Oct. 27: 9 – 10:30 a.m.
  - Wednesday, Nov. 10: 1 – 2:30 p.m.

- **ePen**
  - Thursday, Oct. 28: 9 – 10:30 a.m.
  - Wednesday, Nov. 3: 1 – 2:30 p.m.

- **Box**
  - Monday, Nov. 1: 9 – 10:30 a.m.
  - Friday, Nov. 12: 9 – 10:30 a.m.

- **Robotic process automation (RPA)**
  - Tuesday, Oct. 26: 9 – 10:30 a.m.
  - Monday, Nov. 8: 1 – 2:30 p.m.

QUESTIONS